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D'Amato et al.(10) **Pub. No.: US 2013/0346532 A1**(43) **Pub. Date: Dec. 26, 2013**(54) **VIRTUAL SHARED STORAGE IN A CLUSTER**(52) **U.S. Cl.**

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(57)

ABSTRACT

The present invention minimizes the cost of establishing a cluster that utilizes shared storage by creating a storage namespace within the cluster that makes each storage device, which is physically connected to any of the nodes in the cluster, appear to be physically connected to all nodes in the cluster. A virtual host bus adapter (VHBA) is executed on each node, and is used to create the storage namespace. Each VHBA determines which storage devices are physically connected to the node on which the VHBA executes, as well as each storage device that is physically connected to each of the other nodes. All storage devices determined in this manner are aggregated into the storage namespace which is then presented to the operating system on each node so as to provide the illusion that all storage devices in the storage namespace are physically connected to each node.

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